

Date: Sun, 31 Jul 94 04:30:29 PDT  
From: Ham-Space Mailing List and Newsgroup <ham-space@ucsd.edu>  
Errors-To: Ham-Space-Errors@UCSD.Edu  
Reply-To: Ham-Space@UCSD.Edu  
Precedence: Bulk  
Subject: Ham-Space Digest V94 #210  
To: Ham-Space

Ham-Space Digest                      Sun, 31 Jul 94                      Volume 94 : Issue    210

Today's Topics:

orbs\$210.micro.amsat  
orbs\$210.misc.amsat  
orbs\$210.oscar.amsat

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Send subscription requests to: <Ham-Space-REQUEST@UCSD.Edu>  
Problems you can't solve otherwise to brian@ucsd.edu.

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(by FTP only) from UCSD.Edu in directory "mailarchives/ham-space".

We trust that readers are intelligent enough to realize that all text  
herein consists of personal comments and does not represent the official  
policies or positions of any party. Your mileage may vary. So there.  
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Date: Fri, 29 Jul 1994 08:59:00 MDT  
From: ihnp4.ucsd.edu!news.acns.nwu.edu!math.ohio-state.edu!howland.reston.ans.net!  
gatech!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!  
usenet@network.ucsd.edu  
Subject: orbs\$210.micro.amsat  
To: ham-space@ucsd.edu

SB KEPS @ AMSAT    \$ORBS-210.D  
Orbital Elements    210.MICROS

HR AMSAT ORBITAL ELEMENTS FOR THE MICROSATS  
FROM WA5QGD FORT WORTH,TX July 29, 1994  
BID: \$ORBS-210.D  
TO ALL RADIO AMATEURS BT

Satellite: UO-14  
Catalog number: 20437  
Epoch time:        94206.22284695  
Element set:        13  
Inclination: 98.5894 deg

RA of node: 290.4825 deg  
Eccentricity: 0.0012008  
Arg of perigee: 78.9012 deg  
Mean anomaly: 281.3516 deg  
Mean motion: 14.29850235 rev/day  
Decay rate: -6.0e-08 rev/day^2  
Epoch rev: 23502  
Checksum: 291

Satellite: A0-16  
Catalog number: 20439  
Epoch time: 94206.20702088  
Element set: 811  
Inclination: 98.5977 deg  
RA of node: 291.7399 deg  
Eccentricity: 0.0012239  
Arg of perigee: 79.4923 deg  
Mean anomaly: 280.7641 deg  
Mean motion: 14.29904338 rev/day  
Decay rate: 3.0e-08 rev/day^2  
Epoch rev: 23503  
Checksum: 318

Satellite: D0-17  
Catalog number: 20440  
Epoch time: 94206.22761656  
Element set: 812  
Inclination: 98.5991 deg  
RA of node: 292.0970 deg  
Eccentricity: 0.0012389  
Arg of perigee: 78.8466 deg  
Mean anomaly: 281.4111 deg  
Mean motion: 14.30043974 rev/day  
Decay rate: -4.0e-08 rev/day^2  
Epoch rev: 23505  
Checksum: 302

Satellite: W0-18  
Catalog number: 20441  
Epoch time: 94205.78381851  
Element set: 814  
Inclination: 98.5990 deg  
RA of node: 291.6570 deg  
Eccentricity: 0.0012956  
Arg of perigee: 80.7533 deg  
Mean anomaly: 279.5114 deg  
Mean motion: 14.30018047 rev/day  
Decay rate: -4.0e-08 rev/day^2

Epoch rev: 23499  
Checksum: 314

Satellite: L0-19  
Catalog number: 20442  
Epoch time: 94206.24921416  
Element set: 810  
Inclination: 98.5996 deg  
RA of node: 292.3827 deg  
Eccentricity: 0.0013298  
Arg of perigee: 79.1581 deg  
Mean anomaly: 281.1094 deg  
Mean motion: 14.30114763 rev/day  
Decay rate:  $1.0\text{e-}08$  rev/day<sup>2</sup>  
Epoch rev: 23507  
Checksum: 299

Satellite: U0-22  
Catalog number: 21575  
Epoch time: 94205.73789110  
Element set: 515  
Inclination: 98.4330 deg  
RA of node: 279.4738 deg  
Eccentricity: 0.0007454  
Arg of perigee: 171.9232 deg  
Mean anomaly: 188.2073 deg  
Mean motion: 14.36924859 rev/day  
Decay rate:  $1.8\text{e-}07$  rev/day<sup>2</sup>  
Epoch rev: 15847  
Checksum: 328

Satellite: K0-23  
Catalog number: 22077  
Epoch time: 94206.41547975  
Element set: 410  
Inclination: 66.0810 deg  
RA of node: 199.9404 deg  
Eccentricity: 0.0015234  
Arg of perigee: 277.3412 deg  
Mean anomaly: 82.5876 deg  
Mean motion: 12.86286814 rev/day  
Decay rate:  $-3.7\text{e-}07$  rev/day<sup>2</sup>  
Epoch rev: 9170  
Checksum: 310

Satellite: A0-27  
Catalog number: 22825  
Epoch time: 94206.22287297

Element set: 308  
Inclination: 98.6518 deg  
RA of node: 281.6465 deg  
Eccentricity: 0.0009366  
Arg of perigee: 94.4271 deg  
Mean anomaly: 265.7975 deg  
Mean motion: 14.27629859 rev/day  
Decay rate: -1.4e-07 rev/day^2  
Epoch rev: 4311  
Checksum: 339

Satellite: IO-26  
Catalog number: 22826  
Epoch time: 94206.20110340  
Element set: 308  
Inclination: 98.6520 deg  
RA of node: 281.6684 deg  
Eccentricity: 0.0010136  
Arg of perigee: 97.7120 deg  
Mean anomaly: 262.5225 deg  
Mean motion: 14.27734369 rev/day  
Decay rate: -5.0e-08 rev/day^2  
Epoch rev: 4311  
Checksum: 270

Satellite: KO-25  
Catalog number: 22830  
Epoch time: 94206.20302620  
Element set: 313  
Inclination: 98.5527 deg  
RA of node: 278.5145 deg  
Eccentricity: 0.0012526  
Arg of perigee: 66.4100 deg  
Mean anomaly: 293.8394 deg  
Mean motion: 14.28060612 rev/day  
Decay rate: -2.1e-07 rev/day^2  
Epoch rev: 4312  
Checksum: 259

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Date: Fri, 29 Jul 1994 09:05:00 MDT  
From: ihnp4.ucsd.edu!news.acns.nwu.edu!math.ohio-state.edu!howland.reston.ans.net!  
europa.eng.gtefsd.com!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!  
usenet@network.ucsd.edu  
Subject: orbs\$210.misc.amsat

To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-210.M  
Orbital Elements 210.MISC

HR AMSAT ORBITAL ELEMENTS FOR MANNED AND MISCELLANEOUS SATELLITES  
FROM WA5QGD FORT WORTH, TX July 29, 1994  
BID: \$ORBS-210.M  
TO ALL RADIO AMATEURS BT

Satellite: POSAT  
Catalog number: 22829  
Epoch time: 94206.20886141  
Element set: 301  
Inclination: 98.6465 deg  
RA of node: 281.7033 deg  
Eccentricity: 0.0011077  
Arg of perigee: 84.7659 deg  
Mean anomaly: 275.4787 deg  
Mean motion: 14.28034406 rev/day  
Decay rate: 1.2e-07 rev/day^2  
Epoch rev: 4312  
Checksum: 290

Satellite: MIR  
Catalog number: 16609  
Epoch time: 94208.19718392  
Element set: 690  
Inclination: 51.6474 deg  
RA of node: 346.2470 deg  
Eccentricity: 0.0001596  
Arg of perigee: 176.9266 deg  
Mean anomaly: 183.1737 deg  
Mean motion: 15.56672881 rev/day  
Decay rate: 1.859e-05 rev/day^2  
Epoch rev: 48225  
Checksum: 342

Satellite: HUBBLE  
Catalog number: 20580  
Epoch time: 94208.52592579  
Element set: 511  
Inclination: 28.4706 deg  
RA of node: 336.8557 deg  
Eccentricity: 0.0006320  
Arg of perigee: 147.8719 deg  
Mean anomaly: 212.2252 deg  
Mean motion: 14.90646736 rev/day

Decay rate: 3.63e-06 rev/day^2  
Epoch rev: 3541  
Checksum: 297

Satellite: GRO  
Catalog number: 21225  
Epoch time: 94208.03852033  
Element set: 120  
Inclination: 28.4634 deg  
RA of node: 315.4524 deg  
Eccentricity: 0.0003172  
Arg of perigee: 303.2211 deg  
Mean anomaly: 56.8019 deg  
Mean motion: 15.41089825 rev/day  
Decay rate: 1.628e-05 rev/day^2  
Epoch rev: 6309  
Checksum: 253

Satellite: UARS  
Catalog number: 21701  
Epoch time: 94208.52684492  
Element set: 560  
Inclination: 56.9859 deg  
RA of node: 357.4100 deg  
Eccentricity: 0.0005682  
Arg of perigee: 108.4118 deg  
Mean anomaly: 251.7532 deg  
Mean motion: 14.96553003 rev/day  
Decay rate: 2.576e-05 rev/day^2  
Epoch rev: 15697  
Checksum: 308

/EX

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Date: Fri, 29 Jul 1994 08:57:00 MDT  
From: ihnp4.ucsd.edu!news.acns.nwu.edu!math.ohio-state.edu!howland.reston.ans.net!  
gatech!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!alberta!ve6mgs!  
usenet@network.ucsd.edu  
Subject: orbs\$210.oscar.amsat  
To: ham-space@ucsd.edu

SB KEPS @ AMSAT \$ORBS-210.0  
Orbital Elements 210.OSCAR

HR AMSAT ORBITAL ELEMENTS FOR OSCAR SATELLITES  
FROM WA5QGD FORT WORTH,TX July 29, 1994

BID: \$ORBS-210.0  
TO ALL RADIO AMATEURS BT

Satellite: AO-10  
Catalog number: 14129  
Epoch time: 94195.81899517  
Element set: 290  
Inclination: 27.0497 deg  
RA of node: 317.9184 deg  
Eccentricity: 0.6025942  
Arg of perigee: 194.3808 deg  
Mean anomaly: 135.3303 deg  
Mean motion: 2.05882029 rev/day  
Decay rate: -2.39e-06 rev/day<sup>2</sup>  
Epoch rev: 8335  
Checksum: 326

Satellite: UO-11  
Catalog number: 14781  
Epoch time: 94206.57201705  
Element set: 711  
Inclination: 97.7853 deg  
RA of node: 219.4981 deg  
Eccentricity: 0.0012287  
Arg of perigee: 142.1150 deg  
Mean anomaly: 218.0921 deg  
Mean motion: 14.69232874 rev/day  
Decay rate: 1.26e-06 rev/day<sup>2</sup>  
Epoch rev: 55594  
Checksum: 303

Satellite: RS-10/11  
Catalog number: 18129  
Epoch time: 94205.76394677  
Element set: 929  
Inclination: 82.9269 deg  
RA of node: 301.0678 deg  
Eccentricity: 0.0010302  
Arg of perigee: 284.6472 deg  
Mean anomaly: 75.3539 deg  
Mean motion: 13.72339428 rev/day  
Decay rate: 2.1e-07 rev/day<sup>2</sup>  
Epoch rev: 35506  
Checksum: 320

Satellite: AO-13  
Catalog number: 19216  
Epoch time: 94205.91938835

Element set: 935  
Inclination: 57.7565 deg  
RA of node: 240.1864 deg  
Eccentricity: 0.7222231  
Arg of perigee: 346.4624 deg  
Mean anomaly: 1.6687 deg  
Mean motion: 2.09718427 rev/day  
Decay rate: 2.74e-06 rev/day^2  
Epoch rev: 4680  
Checksum: 323

Satellite: F0-20  
Catalog number: 20480  
Epoch time: 94206.26040988  
Element set: 708  
Inclination: 99.0420 deg  
RA of node: 350.8957 deg  
Eccentricity: 0.0539824  
Arg of perigee: 253.2264 deg  
Mean anomaly: 100.8961 deg  
Mean motion: 12.83226193 rev/day  
Decay rate: -5.1e-07 rev/day^2  
Epoch rev: 20901  
Checksum: 297

Satellite: A0-21  
Catalog number: 21087  
Epoch time: 94208.21479316  
Element set: 493  
Inclination: 82.9441 deg  
RA of node: 113.0988 deg  
Eccentricity: 0.0035418  
Arg of perigee: 335.1148 deg  
Mean anomaly: 24.8298 deg  
Mean motion: 13.74542430 rev/day  
Decay rate: 9.3e-07 rev/day^2  
Epoch rev: 17508  
Checksum: 307

Satellite: RS-12/13  
Catalog number: 21089  
Epoch time: 94205.88513475  
Element set: 711  
Inclination: 82.9215 deg  
RA of node: 343.4852 deg  
Eccentricity: 0.0030108  
Arg of perigee: 6.5069 deg  
Mean anomaly: 353.6469 deg



Mean motion: 13.74044138 rev/day  
Decay rate: 4.2e-07 rev/day^2  
Epoch rev: 17382  
Checksum: 300

Satellite: ARSENE  
Catalog number: 22654  
Epoch time: 94205.08601395  
Element set: 267  
Inclination: 1.9520 deg  
RA of node: 97.7392 deg  
Eccentricity: 0.2917162  
Arg of perigee: 186.8922 deg  
Mean anomaly: 167.2050 deg  
Mean motion: 1.42201946 rev/day  
Decay rate: -1.42e-06 rev/day^2  
Epoch rev: 172  
Checksum: 281

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End of Ham-Space Digest V94 #210  
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